EUROPEAN LARCH CANKER AND PLANS FOR IMPLEMENTATION OF QUARANTINE ACTION

European Larch Canker, caused by the fungus organism *Lachnellula* = *Dasyscypha willkommii*, was known to occur on many species of larch in Europe and Asia prior to its discovery in the U.S. on European and Japanese larch in Essex Co., Massachusetts in 1927. Eradication measures apparently were successful by 1965 and the disease was not known to occur on the North American continent until its discovery in New Brunswick, Canada in 1980. Closest sites to the U.S. border in New Brunswick were St. Stephens and Campobello Island. Cooperative U.S. Forest Service and Maine Forest Service detection survey efforts in 1981 first established the disease to be present in Lubec, within sight of Campobello. Subsequent cooperative survey efforts that year, in 1982, and in 1983 have confirmed the disease to be present also in Machias, Machiasport, Trescott, Edmunds, Whiting, Whitneyville, Beals Island, Rogue Bluffs, Addison, Cutler, Jonesboro, Jonesport, Columbia Falls, Harrington, Steuben, and Cherryfield.

European Larch Canker occurs on species of *Larix* and *Pseudolarix*. Although some species of larch, such as Siberian larch, are resistant to this disease, the commonly planted exotic species; e.g. Japanese and European larch, and native U.S. larches are all susceptible. Disease symptoms include a canary-yellow flagging of cankered branches terminal from the canker, heavy pitching at the canker site, and twig swelling caused by callus growth when the tree attempts to overgrow the canker. Stem cankers also occur, usually on suppressed, understory trees. On both stem and twig cankers, the 1/8" diameter disc-like fruiting structures commonly are apparent, and occur throughout the year. These discs (apothecia) are chaulky white on the underside and margin; orange peel color in the center.

One of the primary purposes of a concerted, cooperative survey effort has been to delineate the boundaries of the infestation. This is the initial step in anticipation of possible quarantine action. Although no quarantine presently exists, parallel quarantine action by the U.S. (APHIS) and the State of Maine is being considered and regulations are being formulated. If implemented, the quarantine would involve the listed townships and a two-township buffer. New Brunswick is also considering similar quarantine action.

All plant parts, with bark, will be regulated, and include current year's shoots (e.g. for scionwood), twigs, branches, boltwood, logs, nursery stock, and seedlings.

Reasons for considering quarantine action are of course to minimize spread, because:

1. Larch is gaining interest as a budworm-resistant species which may in part replace budworm susceptible spruce, fir, and hemlock. Larch plantations are being established more frequently and need protection from this disease.

2. Western larch is an extremely important species in the Pacific Northwest and a strong lobby exists to do everything possible to maintain it in a healthy condition.

(Over)

3. Long distance spread through transport of scionwood for grafting in tree improvement programs may be possible.

Proposed quarantine regulations should not cause undue disruption of present activities involving movement of larch products. All interested parties will be informed of quarantine implementation as soon as such action may take place.

Incidence of Larch Canker can be minimized by maintaining larch in a vigorous condition through adequate spacing when planting, and thinning in stands naturally reproduced. Establishment of new plantations in frost pockets should be discouraged.

For additional information, consult the Maine Forest Service, 50 Hospital Street, Augusta, Maine 04330; telephone 289-2431.